

**\*94633\***

December-19-12 1:26:51 PM

## Quality Control

SmD  
B3.2

2



P. 13/3/22 (2)



0 SmA  
B327

2

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|   |      |      |   |   |                      |   |                |              |   |  |  |
|---|------|------|---|---|----------------------|---|----------------|--------------|---|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____  |      |      |   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                      | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                |              |   |  |  |
| <b>Root Cause</b>   | Date | Step | Qty   | Description of work order update<br>or Non-conformance  | Initial<br>Chief Eng | Action<br>Description   | Sign &<br>Date | Verification | QC Inspector  |  |  |
| Doc/Data <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |   |  |  |
| Equip/Tooling <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |   |  |  |
| Operator <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |   |  |  |
| Material <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |   |  |  |
| Setup <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |   |  |  |
| Other <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |   |  |  |
| Process <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |   |  |  |
| Supplier <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |   |  |  |
| Training <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |   |  |  |
| Unapproved <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |   |  |  |
| <b>FAULT CATEGORY</b>   |      |      |   |   |                      |   |                |              |   |  |  |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |      |      | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                      | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions   |                |              | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |  |  |

# Work Order ID 94633

\*94633\*

Page 2

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Item ID: D412-705-013

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Intake Plenum Access Panel

Start Date: 12/19/12 Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 1/11/13 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description   | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130                            |  | 0.00                 |         |        |              |               |               |                  |                |
| *130*                          | Packaging  |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Identify and pack for shipping as per PPP D412-705-013 Location: <u>FG 010</u> |                      |         |        |              |               |               |                  |                |
|                                | Rev: <u>D</u>  |                      |         |        |              |               |               |                  |                |
| 140                            | QC21- Final Inspection - Work Order Release                                    | 0.00                 |         |        |              |               |               |                  |                |
| *140*                          |  |                      |         |        |              |               |               |                  |                |
| QC                             | Memo   | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |  |                      |         |        |              |               |               |                  |                |

04-01-13

13-04-02

13-04-2

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
|---|-------------|-------------|---|---|--------------------------|---|------------------------|---------------------|--|--|---|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____  |             |             |   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                          | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                        |                     |  |  |   |  |
| <b>Root Cause</b>   | <b>Date</b> | <b>Step</b> | <b>Qty</b>  | <b>Description of work order update or Non-conformance</b>  | <b>Initial Chief Eng</b> | <b>Action Description</b>   | <b>Sign &amp; Date</b> | <b>Verification</b> | <b>QC Inspector</b>  |  |   |  |
| Doc/Data <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Equip/Tooling <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Operator <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Material <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Setup <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Other <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Process <input type="checkbox"/>  |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Supplier <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Training <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| Unapproved <input type="checkbox"/>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| <b>FAULT CATEGORY</b>   |             |             |   |   |                          |   |                        |                     |  |  |   |  |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |             |             | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                          | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions   |                        |                     | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |  | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |  |

# Picklist Print

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Page 1

Work Order ID: 94633

Parent Item: D412-705-013

Parent Item Name: Intake Plenum Access Panel

Start Date: 12/19/12

Required Date: 1/11/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-09-09 JLM Verified By:EC  
IPP Rev:B ECN 1052 07-11-05 DD Verified by:EC  
12.11.07 DD Verified by:JLM IPP Rev:C ECN 12-670

| Component Item ID/<br>Item Name           | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand  | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|-----------------|-------------|--------------|---------------|----------------|--------|
| <b>D3245-041</b><br>Access Panel Assembly |                        | Manufactured  | No          |                     |                  | 120             | Each               | 0.0000          | 1           | 2            | 93922         |                |        |
| <b>D3245-042</b><br>Access Panel Assembly |                        | Manufactured  | No          |                     |                  | 120             | Each               | 1.0000          | 1           | 2            | 93357         |                |        |
|   |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |              |               |                |        |
|   |                        |               |             | ST232A              |                  | 1               |                    |                 |             |              |               |                |        |
|   |                        |               |             | 86885               |                  | 1               |                    |                 |             |              |               |                |        |
| <b>D3245-043</b><br>Door Assembly         |                        | Manufactured  | No          |                     |                  | 120             | Each               | 3.0000          | 2           | 4            | 87938         |                |        |
|   |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |              |               |                |        |
|   |                        |               |             | ST232A              |                  | 3               |                    |                 |             |              |               |                |        |
|   |                        |               |             | 87937               |                  | 3               |                    |                 |             |              |               |                |        |
| <b>D3245-11</b><br>Gasket 9.01            |                        | Manufactured  | No          |                     |                  | 120             | Each               | 1.0000          | 2           | 4            | 94610         |                |        |
|   |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |              |               |                |        |
|   |                        |               |             | ST232               |                  | 1               |                    |                 |             |              |               |                |        |
|   |                        |               |             | 86101               |                  | 1               |                    |                 |             |              |               |                |        |
| <b>D3245-13</b><br>Gasket 9.50            |                        | Manufactured  | No          |                     |                  | 120             | Each               | 27.0000         | 2           | 4            |               |                |        |
|   |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |              |               |                |        |
|   |                        |               |             | ST232               |                  | 27              |                    |                 |             |              |               |                |        |
|   |                        |               |             | 85090               |                  | 27              |                    |                 |             |              |               |                |        |
| <b>D3245-9</b><br>Gasket 8.35             |                        | Manufactured  | No          |                     |                  | 120             | Each               | 12.0000         | 2           | 4            |               |                |        |
|   |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |              |               |                |        |
|   |                        |               |             | ST232               |                  | 12              |                    |                 |             |              |               |                |        |
|   |                        |               |             | 85091               |                  | 12              |                    |                 |             |              |               |                |        |

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|   |      |      |   |   |                      |   |                |              |  |  |   |  |
|---|------|------|---|---|----------------------|---|----------------|--------------|--|--|---|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____  |      |      |   | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                      | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                |              |  |  |   |  |
| <b>Root Cause</b>   | Date | Step | Qty   | Description of work order update<br>or Non-conformance  | Initial<br>Chief Eng | Action<br>Description   | Sign &<br>Date | Verification | QC Inspector   |  |   |  |
| Doc/Data <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |  |  |   |  |
| Equip/Tooling <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |  |  |   |  |
| Operator <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |  |  |   |  |
| Material <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |  |  |   |  |
| Setup <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |  |  |   |  |
| Other <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |  |  |   |  |
| Process <input type="checkbox"/>  |      |      |   |   |                      |   |                |              |  |  |   |  |
| Supplier <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |  |  |   |  |
| Training <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |  |  |   |  |
| Unapproved <input type="checkbox"/>   |      |      |   |   |                      |   |                |              |  |  |   |  |
| <b>FAULT CATEGORY</b>   |      |      |   |   |                      |   |                |              |  |  |   |  |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |      |      | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |   |                      | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions   |                |              | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |  | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |  |

# Picklist Print

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Page 2

Work Order ID: 94633

Parent Item: D412-705-013

Start Date: 12/19/12

Required Date: 1/11/13

Parent Item Name: Intake Plenum Access Panel

Start Qty: 2.00

Required Qty: 2.00

MS20427M3-31

Purchased

No

120

Each

155.0000

16

32

Rivet

Location

Loc Qty

Loc Code

GA

155

123352

155

MS21060-L3K

Purchased

No

120

Each

300.0000

8

16

Nut Plate

Location

Loc Qty

Loc Code

ST316

300

124028

300

M124231

12/3/12 (2)

124028 PY

M124 586 1154

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |   |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Setup <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Other <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |   |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

|   |   |   |
|---|---|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions |
|   |   | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge  |
|   |   | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other   |



## 5.0 PARTS LIST

Sm

| Qty<br>-011 | Qty<br>-013 | Qty<br>-015 | Qty<br>-017 | Qty<br>-019 | Qty<br>-021 | Qty<br>-023 | Part Number  | Description                                  |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--|
| X           |             |             |             |             |             |             | D412-705-011 | TWIN PAK E-Z ACCESS KIT                      |
| 1           | X           |             |             |             |             |             | D412-705-013 | INTAKE PLENUM ACCESS PANEL KIT               |
| 1           |             | X           |             |             |             |             | D412-705-015 | DRIVESHAFT TUNNEL MODIFICATION KIT           |
| 1           |             |             | X           |             |             |             | D412-705-017 | N1 GEARBOX ACCESS PANEL KIT                  |
| 1           |             |             |             | X           |             |             | D412-705-019 | C-BOX OIL COOLER LINE SUPPORT ACCESS KIT     |
| 1           |             |             |             |             | X           |             | D412-705-021 | OIL PRESSURE TRANSMITTER ACCESS KIT          |
| 1           |             |             |             |             |             | X           | D412-705-023 | OIL COOLER SUPPORT REMOVABLE LOWER PANEL KIT |
|             |             |             |             |             |             |             |              |  |
|             |             |             |             |             |             |             | D3245-041    | ACCESS PANEL ASSEMBLY, LH                    |
|             |             |             |             |             |             |             | D3245-042    | ACCESS PANEL ASSEMBLY, RH                    |
|             |             |             |             |             |             |             | D3245-043    | DOOR ASSEMBLY                                |
|             |             |             |             |             |             |             | D3245-9      | GASKET                                       |
|             |             |             |             |             |             |             | D3245-11     | GASKET                                       |
|             |             |             |             |             |             |             | D3245-13     | GASKET                                       |
|             |             |             | 1           |             |             |             | D3255-041    | ACCESS PANEL ASSEMBLY, LH                    |
|             |             |             | 1           |             |             |             | D3255-042    | ACCESS PANEL ASSEMBLY, RH                    |
|             |             | 1           |             |             |             |             | D3256-1      | ACCESS PANEL                                 |
|             |             | 1           |             |             |             |             | D3256-3      | GASKET                                       |
|             |             |             |             | 1           |             |             | D3259-041    | ACCESS PANEL ASSEMBLY, LH                    |
|             |             |             |             | 1           |             |             | D3259-042    | ACCESS PANEL ASSEMBLY, RH                    |
|             |             |             |             |             | 1           |             | D3307-041    | ACCESS PANEL ASSEMBLY                        |
|             |             |             |             |             |             | 30          | AN3-3A       | BOLT   |
|             |             | 22          | 30          |             | 6           |             | AN3C-3A      | BOLT   |
|             |             | 3           |             |             |             |             | AN3C-4A      | BOLT   |
|             |             |             |             |             |             | 30          | AN960JD10    | WASHER                                       |
|             | 16          | 44          | 36          |             | 12          |             | MS20427M3-3  | RIVET  |
|             |             |             |             |             |             | 2           | MS21051-L3K  | NUT PLATE                                    |
|             | 8           | 22          | 18          |             | 6           |             | MS21060-L3K  | NUT PLATE                                    |
|             |             |             |             |             |             | 18          | MS21069-L3K  | NUT PLATE                                    |
|             |             | 25          | 30          |             | 6           |             | MS9321-09    | WASHER                                       |

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Revision: C

Date: 07.10.12

# Work Order ID 94633

December-19-12 1:26:51 PM

**\*94633\***

Page 1

Item ID: D412-705-013  
Revision ID:  
Item Name: Intake Plenum Access Panel

Accept

**\*N9000040100\***

Setup Start **\*NS1\***  
Stop **\*NS2\***

Start Date: 12/19/12 Start Qty: 2.00 **\*2\***  
Required Date: 1/11/13 Req'd Qty: 2.00 **\*2\***

Cust Item ID:  
Customer:

## Reference:

Approvals: Process Plan:  Date: 12-01-12 Tooling: Date:  
QC: Date: SPC (Y/N):

Run Start **\*NR1\***  
Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| N/A      | Rev C        |

|                  |   |      |  |  |  |  |  |  |  |
|------------------|---|------|--|--|--|--|--|--|--|
| 100              | DOCUMENT CONTROL                                      | 0.00 |  |  |  |  |  |  |  |
| <b>*100*</b>     |   |      |  |  |  |  |  |  |  |
| DC               | Memo  | 0.00 |  |  |  |  |  |  |  |
| Document Control | Photocopy bluefile & type labels per PPP D412-705-013 |      |  |  |  |  |  |  |  |

|              |          |      |  |  |  |  |  |  |  |
|--------------|----------|------|--|--|--|--|--|--|--|
| 110          | Pick Kit | 0.00 |  |  |  |  |  |  |  |
| <b>*110*</b> |          |      |  |  |  |  |  |  |  |
| Packaging    | Memo     | 0.00 |  |  |  |  |  |  |  |
| Packaging    |          |      |  |  |  |  |  |  |  |

|                 |   |      |  |  |  |  |  |  |  |
|-----------------|---|------|--|--|--|--|--|--|--|
| 120             | QC4- 100% Inspect kits for completeness | 0.00 |  |  |  |  |  |  |  |
| <b>*120*</b>    |   |      |  |  |  |  |  |  |  |
| QC              | Memo                                    | 0.00 |  |  |  |  |  |  |  |
| Quality Control |   |      |  |  |  |  |  |  |  |

ML5 13-03-22  
